October 25, 2001

David Neil, President
Casting Service
P.O. Box 488
La Porte, Indiana 46350

Re: Significant Source Modification No:
091-14518-00018

Dear Mr. Neil:

Casting Service applied for a Part 70 operating permit on June 17, 1996 for gray iron foundry. An application to modify the source was received on June 7, 2001. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

One (1) Telerob Ironman grinding system, known as Telerob (P13), equipped with a baghouse, known as C15, exhausting through Stack S15, capacity: 9,731 pounds of castings per hour.

The Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Frank P. Castelli, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
FPC/MES
cc: File - LaPorte County
U.S. EPA, Region V
LaPorte County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Rick Massoels
Compliance Branch - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 SIGNIFICANT SOURCE MODIFICATION
OFFICE OF AIR QUALITY

Casting Service
300 Philadelphia Street
LaPorte, Indiana 46350

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 091-14518-00018	
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: October 25, 2001

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary gray iron foundry.

Responsible Official:	David Neil, President
Source Address:	300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address:	P.O. Box 488, LaPorte, Indiana 46350
General Source Phone Number:	219 - 362 - 1000
SIC Code:	3321
County Location:	LaPorte
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

One (1) Telerob Ironman grinding system, known as Telerob (P13), equipped with a baghouse, known as C15, exhausting through Stack S15, capacity: 9,731 pounds of castings per hour.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source modification does not include any insignificant activities as defined in 326 IAC 2-7-1(21).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)] [326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

(e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

(1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.

(2) If the Part 70 permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.

(3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will be issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The

records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.11 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a temperature, flow rate, or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

(A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.

(c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.

(f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.14 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, Northwest Regional Office, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

Telephone Number: 219-881-6712 (Northwest Regional Office)
Facsimile Number: Fax 219-881-6745 (Northwest Regional Office)

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are

available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Grinding System

One (1) Telerob Ironman grinding system, known as Telerob (P13), equipped with a baghouse, known as C15, exhausting through Stack S15, capacity: 9,731 pounds of castings per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the grinding system, known as Telerob (P13), shall not exceed 11.8 pounds per hour when operating at a process weight rate of 9,731 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 Prevention of Significant Deterioration [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable:

(a) The PM emissions from the grinding system, known as Telerob (P13), exhausted through Stack S15, shall not exceed 5.70 pounds per hour, averaged over three (3) hours, equivalent to twenty-five (25) tons per year.

(b) The PM_{10} emissions from the grinding system, known as Telerob (P13), exhausted through Stack S15, shall not exceed 3.42 pounds per hour, averaged over three (3) hours, equivalent to fifteen (15) tons per year.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.4 Particulate Matter (PM)

In order to comply with Condition D.1.2, the baghouse for PM control shall be in operation and control emissions from the grinding system at all times that the grinding system is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Visible Emissions Notations

(a) Visible emission notations of the grinding system baghouse stack exhaust shall be performed during normal daylight operations once per shift when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the grinding system, at least once per shift when the grinding system is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.7 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the grinding system operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corre-

sponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain records of visible emission notations once per shift of the grinding system baghouse stack exhaust.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain the following:

(1) Records of the following operational parameters during normal operation when venting to the atmosphere once per shift:

(A) Inlet and outlet differential static pressure; and

(B) Cleaning cycle operation.

(2) Documentation of the dates vents are redirected.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7 and the dates the vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Casting Service
Source Address: 300 Philadelphia Street, LaPorte, Indiana 46350
Mailing Address: P.O. Box 488, LaPorte, Indiana 46350
Source Modification No.: 091-14518-00018

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Mail to: Permit Administration & Development Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

Casting Service
P.O. Box 488
La Porte, Indiana 46350

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____ , I have personal knowledge of the
(Company Name)
representations contained in this affidavit and am authorized to make these representations on behalf of _____ .
(Company Name)

4. I hereby certify that Casting Service, 300 Philadelphia Street, La Porte, Indiana 46350, completed construction of the Telerob grinding system on _____ in conformity with the requirements and intent of the modification application received by the Office of Air Quality on June 7, 2001 and as permitted pursuant to **Source Modification No. 091-14518-00018** issued on _____ .

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

_____
Signature

_____
Date

STATE OF INDIANA)
)SS
COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on this _____ day of _____, 20 _____ .

My Commission expires: _____ .

_____
Signature

_____
Name (typed or printed)

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Part 70 Significant Source Modification

Source Name: **Casting Service**
Source Location: **300 Philadelphia Street, LaPorte, Indiana 46350**
County: **LaPorte**
SIC Code: **3321**
Source Modification: **091-14518-00018**
Permit Reviewer: **Frank P. Castelli**

On September 10, 2001, the Office of Air Quality (OAQ) had a notice published in the LaPorte Herald-Argus, LaPorte, Indiana, stating that Casting Service had applied for a Significant Source Modification for a gray iron foundry. The notice also stated that OAQ proposed to issue a Significant Source Modification for this operation and provided information on how the public could review the proposed Significant Source Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Source Modification should be issued as proposed.

On October 10, 2001, Laurie Ropel of Casting Service submitted comments on the proposed Significant Source Modification. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded.**

Comment 1:

Please revise the Stack Summary in the Technical Support Document as shown below.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S15	Telerob Ironman grinding system	~~30.0~~ *40.0*	~~3.5~~ *2.0*	40,000	68

Response 1:

The stack parameters have been revised in this TSD Addendum and not in the original TSD due to the above change in the permit application as follows:

Stack ID	**Operation**	**Height** (feet)	**Diameter** (feet)	**Flow Rate** (acfm)	**Temperature** (EF)
S15	Telerob Ironman grinding system	**40.0**	**2.0**	40,000	68

Comment 2:

Please revise draft operation Condition D.1.2 and corresponding Compliance Requirements in the Technical Support Document as shown below.

D.1.2 Prevention of Significant Deterioration [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable:

(a) The PM emissions from the grinding system, known as Telerob (P13), exhausted through Stack S15, shall not exceed 5.70 pounds per hour *averaged over three hours*, equivalent to twenty-five (25) tons per year.

(b) The PM_{10} emissions from the grinding system, known as Telerob (P13), exhausted through Stack S15, shall not exceed 3.42 pounds per hour *averaged over three hours*, equivalent to fifteen (15) tons per year.

Reason for change: The proposed condition is consistent with the emission testing procedure described in 326 IAC 3-4-1 (4), which states that "a test shall comprise three (3) sampling runs for a specified sampling time span." The proposed condition specifies a one hour sampling time span. Further, past permit conditions have particulate limits averaged over (3) three hours.

Response 2:

Condition D.1.2 has been revised as follows to allow for a three (3) hour average time period to comply with the PM and PM_{10} emission limits.

D.1.2 Prevention of Significant Deterioration [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable:

(a) The PM emissions from the grinding system, known as Telerob (P13), exhausted through Stack S15, shall not exceed 5.70 pounds per hour, **averaged over three (3) hours,** equivalent to twenty-five (25) tons per year.

(b) The PM_{10} emissions from the grinding system, known as Telerob (P13), exhausted through Stack S15, shall not exceed 3.42 pounds per hour, **averaged over three (3) hours,** equivalent to fifteen (15) tons per year.

Comment 3:

Please revise draft operation Condition D.1.5 and corresponding Compliance Requirements in the Technical Support Document as shown below.

D.1.5 Visible Emissions Notations

(a) Visible emission notations of the grinding system baghouse stack exhaust shall be performed during normal daylight operations once per ~~shift~~ *day* when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

Reason for change: A noticeable change in visible emissions is not likely to occur in an eight hour period. This change is consistent with existing permit requirements applicable to other baghouses in the facility, which allow visible emission notations on a daily basis, rather than each shift.

Response 3:

Compliance monitoring conditions are in the proposed permit in order to ensure continuous compliance with the requirements. The suggested wording would allow for less frequent compliance monitoring, which would not accomplish the purpose of compliance monitoring.

Baghouse failure can occur suddenly; therefore monitoring of visible baghouse emissions should be performed more frequently than daily in such cases where a source operates more than one shift per day. The OAQ believes that visible emissions notations once per operating shift are a reasonable requirement. Therefore, the requirements to perform visible emissions notations have not been changed.

Comment 4:

Please revise draft operation Condition D.1.6 and corresponding Compliance Requirements in the Technical Support Document as shown below.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the grinding system, at least once per ~~shift~~ *day* when the grinding system is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above-mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Reason for change: The pressure drop is not likely to change significantly in an eight hour period. This change is consistent with existing permit requirements applicable to other baghouses in the facility, which allow daily pressure drop readings.

Response 4:

Compliance monitoring conditions are in the permit in order to ensure continuous compliance with the requirements. The suggested wording would allow for less frequent compliance monitoring, which would not accomplish the purpose of compliance monitoring. Baghouse failure can occur suddenly; therefore monitoring of baghouse operational parameters should be performed more frequently than daily in such cases where a source operates more than one shift per day. The OAQ believes that monitoring the pressure drop once per operating shift is a reasonable requirement. Therefore, the requirements to perform baghouse pressure drop monitoring in Condition D.1.6 have not been changed.

Comment 5:

Please revise draft operation Condition D.1.7 and corresponding Compliance Requirements in the Technical Support Document as shown below.

D.1.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of ~~all bags~~ *the baghouse* controlling the grinding system operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

Reason for change: Defective filter bags would be noticed during the visible emission notation performed daily. In addition, Casting Service regularly performs preventive maintenance inspections on its entire baghouses. Further, past permit conditions allow inspections of the baghouse instead of the bags.

Response 5:

Inspections of all bags controlling the grinding system operation when venting to the atmosphere. are necessary so that all defective bags can be identified before failure. Inspections of the "baghouse" are not specific and the bags, themselves, need to be inspected. Therefore, Condition D.1.7 has not been changed.

Comment 6:

Please revise draft operation Condition D.1.8 and corresponding Compliance Requirements in the Technical Support Document as shown below.

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

1) For single compartment baghouses, *if the failure results in a significant drop in the baghouse's pressure readings with abnormal visible emissions or if the failure results in an opacity violation,* failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. ~~Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).~~

Reason for change: As stated in CS's Petition for Administrative Review and Request for Stay of Effectiveness in a similar Construction Permit CP 091-10136-00018, the draft operation condition is unclear because the method for determining bag failure is undefined. CS requests that the permit condition include Ms. Zlatos's, IDEM counsel, definition of bag failure provided during an April 26, 1999 telephone conversation with Mr. Westwood, CS counsel, regarding Cause Number 99-A-J-2374.

Response 6:

Condition D.1.8(b) has been clarified for single compartment baghouses to state that if a failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The last sentence in Condition D.1.8 has been deleted due to its redundancy with the Emergency Provision condition in Section B. In addition, the reference to Emergency Provisions should have been Section C, not Section B. The proposed Condition D.1.8 has been revised as follows:

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section **B** ~~C~~ - Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure

and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, **if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows,** failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. ~~Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions)~~.

Comment 7:

Please revise draft operation Condition D.1.9 and corresponding Compliance Requirements in the Technical Support Document as shown below.

D.1.9 Record Keeping Requirements

(b) To document compliance with Condition D.1.6, the Permittee shall maintain the following:

(1) Records of the following operational parameters during normal operation when venting to the atmosphere ~~once per shift~~ *once per day*:

(A) Inlet and outlet differential static pressure;

and

(B) Cleaning cycle operation.

Reason for Change: See comments made regarding operation Condition D.1.6.

Response 7:

As discussed in Responses 3 and 4 regarding Condition D.1.5, visible emissions notations, and Condition D.1.6, parametric monitoring, both required observations once per shift. Therefore, Condition D.1.9(a) has been corrected as follows:

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain records of ~~daily~~ visible emission notations **once per shift** of the grinding system baghouse stack exhaust.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain the following:

(1) Records of the following operational parameters during normal operation when venting to the atmosphere once per shift:

Upon further review, the OAQ has decided to make the following changes to the Significant Source Modification: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded)**:

Change 1:

Condition B.4 (e)(3) has been clarified to state that if the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will be issued after EPA review as follows:

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

(e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

(1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.

(2) If the Part 70 permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.

(3) If the Part 70 permit has ~~not~~ gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will be issued after EPA review.

Change 2:

In Condition C.13, the reference to Monitoring Data Availability has been removed since it is not a condition in the proposed permit as follows:

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (~~Monitoring Data Availability,~~ General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification

Source Background and Description

Source Name:	**Casting Service**
Source Location:	**300 Philadelphia Street, La Porte, Indiana 46350**
County:	**LaPorte**
SIC Code:	**3321**
Operation Permit No.:	**T 091-6141-00018**
Operation Permit Issuance Date:	**Not Yet Issued**
Significant Source Modification No.:	**091-14518-00018**
Permit Reviewer:	**Frank P. Castelli**

The Office of Air Quality (OAQ) has reviewed a modification application from Casting Service relating to the construction and operation of the following emission unit and pollution control device:

> One (1) Telerob Ironman grinding system, known as Telerob (P13), equipped with a baghouse, known as C15, exhausting through Stack S15, capacity: 9,731 pounds of castings per hour.

History

On June 7, 2001, Casting Service submitted an application to the OAQ requesting to add a Telerob Ironman grinding system, known as Telerob (P13), equipped with a baghouse, known as C15, exhausting through Stack S15 with a capacity of 9,731 pounds of casting per hour to their existing major PSD source. This grinding system will partially automate the existing manual grinding system. The replacement of this manual grinding by the Telerob grinding system will not increase the utilization either upstream or downstream of this process.

The source has submitted a Part 70 Operating Permit application on June 17, 1996. The Telerob Ironman grinding system proposed in this modification is being reviewed under the Part 70 Operating program and will be incorporated into the Part 70 Operating Permit.

Casting Service has requested that if stack testing shows that the potential to emit PM and PM_{10} before controls is less than twenty-five (25) tons per year, this significant source modification be re-issued as a minor source modification and all compliance monitoring requirements for the control device be removed. The allowable PM emission rate of 11.8 pounds per hour pursuant to 326 IAC 6-3-2 is greater than the uncontrolled potential PM emission rate of 7.78 pounds per hour. However, since the control device for this existing major PSD source is currently needed to render the requirements of 326 IAC 2-2 not applicable, compliance monitoring requirements have been included in this source modification.

If the stack testing should reveal that the potential to emit PM and PM_{10} are both less than twenty-five (25) tons per year, then the control device would not have to be operated at all times to comply with 326 IAC 6-3-2 and 326 IAC 2-2. Therefore, the compliance monitoring requirements for the control device would not be necessary.

Existing Approvals

The source applied for a Part 70 Operating Permit T 091-6141-00018 on June 17, 1996. The source has been operating under previous approvals including, but not limited to the following:

(a) CP 091-1737, issued on December 6, 1990,

(b) CP 091-2238 issued on January 21, 1994,

(c) CP 091-10023 issued on January 12, 1999,

(d) CP 091-10136 issued on April 21, 1999,

(e) SSM 091-10594 issued on July 22, 1999, and

(f) AA 091-11608 issued on December 15, 1999.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S15	Telerob Ironman grinding system	30.0	3.5	40,000	68

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on June 7, 2001. Additional information was received on July 23, 2001.

Emission Calculations

See page 1 of 1 of Appendix A of this document for detailed emissions calculations.

The potential PM and PM_{10} emissions cannot take into account the inside building settling factor. As per discussions with U.S. EPA, the emission factors should be used that represent the total emission factor rather than the emission factor which only accounts for that emitted directly to the atmosphere.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or opera-

tional limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	**Potential To Emit** (tons/year)
PM	34.1
PM_{10}	3.41
SO_2	-
VOC	-
CO	-
NO_X	-

HAPs	**Potential To Emit** (tons/year)
Total	0.273

Justification for Modification

(a) The Part 70 Operating Permit is being modified through a Part 70 Significant Source Modification to a yet to be issued Part 70 Operating Permit because the potential to emit PM before controls of this modification exceeds twenty five (25) tons per year. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4).

(b) Since the Part 70 Operating Permit for this source has not been issued yet, the approval of this Significant Source Modification will allow the source to construct and operate.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1999 OAQ emission data.

Pollutant	**Actual Emissions** (tons/year)
PM	Not Reported
PM_{10}	50.8
SO_2	19.1
VOC	80.8
CO	2.84
NO_X	9.92

Pollutant	Actual Emissions (tons/year)
ETHYL BENZENE	0.044
STYRENE	0.223
ACROLEIN	0.006
ETHYLENE GLYCOL	0.008
METHYL ISOBUTYL KETONE	1.184
TOLUENE	1.592
PHENOL	1.263
HEXANE	0.133
TETRACHLOROETHYLENE	7.65
DIMETHYL PHTHALATE	0.488
XYLENE (MIXED ISOMERS)	1.574
FORMALDEHYDE	0.161
METHANOL	1.38
BENZENE	14.048
ACETALDEHYDE	0.042
METHYLENE CHLORIDE	1.357
METHYL ETHYL KETONE	0.134
DIBUTYL PHTHALATE	0.001
NAPHTHALENE	0.062
ARSENIC COMPOUNDS	0.006
CADMIUM COMPOUNDS	0.003
CYANIDE COMPOUNDS	0.094
COBALT COMPOUNDS	0.001
CHROMIUM COMPOUNDS	0.016
MANGANESE COMPOUNDS	1.329
NICKEL COMPOUNDS	0.029
LEAD COMPOUNDS	0.019

County Attainment Status

The source is located in LaPorte County.

Pollutant	Status
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. LaPorte County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) LaPorte County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	**Emissions** (tons/year)
PM	less than 100
PM_{10}	greater than 100
SO_2	less than 100
VOC	greater than 100
CO	greater than 100
NO_X	greater than 100

(a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of one hundred (100) tons per year or more, and it is one of the 28 listed source categories.

(b) These emissions are based upon the Technical Support Document for SSM 091-10594-00018, issued on July 22, 1999.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Pollutant	PM (tons/yr)	PM_{10} (tons/yr)	SO_2 (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO_X (tons/yr)
Proposed Modification (P13)	1.88*	0.188*	-	-	-	-
PSD Significant Level	25	15	40	40	100	40

*The PM and PM_{10} potential to emit of 1.88 and 0.188 tons per year, respectively are the potentials to emit after control.

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T 091-6141-00018) permit application on June 17, 1996. The grinder and baghouse being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The proposed modification of this existing PSD major source is not subject to the requirements of 326 IAC 2-2 since to potential to emit PM and PM_{10}, after controls, is less than the PSD significant levels of twenty-five (25) and fifteen (15) tons per year, respectively. Therefore, in order to render the requirements of 326 IAC 2-2 not applicable, the operation of the baghouse will be required at all times.

326 IAC 6-3-2 (Process Operations)

(a) The allowable PM emission rate from the Telerob Ironman grinding system shall not exceed 11.8 pounds per hour when operating at a process weight rate of 9,731 pounds per hour (4.87 tons per hour).

The PM emissions from the grinder after controls are 0.428 pounds per hour which is less than the allowable PM emission rate of 11.8 pounds per hour. Therefore, the grinder is in compliance with this rule.

(b) The particulate matter (PM) allowable emission rate was calculated by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The baghouse does not have to be in operation at all times the Telerob Ironman grinding system is in operation, in order to comply with 326 IAC 6-3-2 since the potential PM emission rate of 7.78 pounds per hour before controls is less than the allowable PM emission rate of 11.8 pounds per hour. However, the baghouse does need to be operated at all times to render the requirements of 326 IAC 2-2 not applicable.

Testing Requirements

Although PM and PM_{10} testing will not be required by IDEM, OAQ, the source has indicated the desire to perform stack testing to prove that the potential PM emission rate before controls is less than twenty-five (25) tons per year. Since this is voluntary, PM and PM_{10} testing has not been incorporated into this permit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The Telerob Ironman grinding system has applicable compliance monitoring conditions as specified below:

(1) Visible emissions notations of the Telerob Ironman grinding system baghouse exhaust shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

(2) The Permittee shall record the total static pressure drop across the baghouse controlling the Telerob Ironman grinding system, at least once per shift when the Telerob Ironman grinding system is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 to 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

(3) An inspection shall be performed each calender quarter of all bags controlling the operations at this source when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

(4) In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B-Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouse for the Telerob Ironman grinding system must operate properly to ensure compliance with 326 IAC 2-2) and 326 IAC 2-7 (Part 70).

Conclusion

The construction and operation of this Telerob Ironman grinding system shall be subject to the conditions of the attached proposed Significant Source Modification No. 091-14518-00018.

Potential Emissions Calculations

Company Name: Casting Service
Address City IN Zip: 300 Philadelphia Street, La Porte, IN 46350
Source Modification: 091-14518
Plt ID: 091-00018
Reviewer: Frank P. Castelli
Date: June 7, 2001

Telerob Ironman Grinding System P13

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/year)	Overall Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/year)	Allowable Emission Rate (lbs/hr)
PM	4.87	1.60	7.78	34.1	94.50%	0.428	1.88	11.8
PM10	4.87	0.16	0.78	3.41	94.50%	0.043	0.19	

Emission factors from AP-42 technical source document Gutow's "An Inventory of Iron Foundry Emissions".

HAPs are 0.8 % of the total PM emissions, therefore potential HAPs emissions before controls are: **0.272779 tons/year**
HAPs after controls are: **0.015003 tons/year**

Based on draft report dated 2/23/00 by Research Triangle Institute

Allowable PM Emissions = 4.10(Process Weight Rate)^0.67 pursuant to 326 IAC 6-3-2.